



DE-FOA-0002388 – ECOSynBio SBIR/STTR

Questions can be sent to ARPA-E-CO@hq.doe.gov

FIRST DEADLINE FOR QUESTIONS TO ARPA-E-CO@HQ.DOE.GOV: 5 PM ET, OCTOBER 16, 2020

SECOND DEADLINE FOR QUESTIONS TO ARPA-E-CO@HQ.DOE.GOV:
5 PM ET, JANUARY 22, 2021

QUESTIONS AND ANSWERS

PLEASE REFER TO THE GENERAL FAQs SECTION OF ARPA-E'S WEBSITE ([HTTP://ARPA-E.ENERGY.GOV/?Q=FAQ/GENERAL-QUESTIONS](http://arpa-e.energy.gov/?q=faq/general-questions)) FOR ANSWERS TO MANY GENERAL QUESTIONS ABOUT ARPA-E AND ARPA-E'S FUNDING OPPORTUNITY ANNOUNCEMENTS. ADDITIONAL QUESTIONS SPECIFIC TO THIS FOA ONLY ARE INCLUDED BELOW. PLEASE REVIEW ALL EXISTING GENERAL FAQs AND FOA-SPECIFIC QUESTIONS BEFORE SUBMITTING NEW QUESTIONS TO ARPA-E.

I. Concept Paper Phase Questions:

Q1. We'd like to determine whether our technology for converting biogas to methanol using clean electricity is responsive to this funding opportunity. ...

ANSWER: ARPA-E will not pre-assess an applicant's proposal or teaming arrangement. Prospective applicants must review the technical requirements of the FOA and independently determine whether their proposed concept warrants a submission.

Q2. ... In past ARPA-E projects, [omitted] has proposed as a team member/subrecipient through the F[ield] W[ork] P[roposal] process but was later told the award would be issued directly to the prime sponsor/small business, and that [omitted] would then need to submit a Strategic Partnership Projects project proposal for re-approval by DOE. Does this depend on the specific solicitation? That is, will the FWP process or SPP process be the correct proposal submission avenue for this solicitation?

ANSWER: This information will be provided by FOA amendment in December 2020.

Q3. ... Our technology involves using a combination of both [description omitted]. Is a technology in this vein a suitable submission for this category?

ANSWER: Refer to ECOSynBio SBIR/STTR FAQ 1 above.

Q4. This is Toni Lee, the Director of Enzymology at Solugen. We are a small biotech/metal catalysis startup focused on generating commodity chemicals in a carbon-negative manner from renewable materials using enzymes and heterogeneous metal catalysis. We are interested in applying for funding under DE-FOA-0002388. The technology involves using enzymes (cofactor free or utilizing cofactors that are easily regenerated with exposure to atmospheric gases) in an in vitro system to generate from ethanol and CO2 a C3 product that can be further valorized to generate a number of polymer monomers. Is a technology in this vein a suitable submission for this FOA?

ANSWER: Refer to ECOSynBio SBIR/STTR FAQ 1 above.



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Q5. This is Frederyk Ngantung, Vice President of Product at Solugen. We are contemplating to submit ARPA-E DE-FOA-0002388: ENERGY AND CARBON OPTIMIZED SYNTHESIS FOR THE BIOECONOMY (ECOSYNBIO) SBIR/STTR proposal. Our technology enables the sequestration of CO2 and at the same time, we are able to produce bio-based and renewable solvent (ethyl pyruvate, or ethyl lactate) along the way; and we do this all from renewable feedstocks (ethanol and sugar from the USA) via cell-free enzyme synthesis.

We believed our proposal fits within the spirit of "Energy and Carbon Optimized Synthesis for the Bioeconomy" and that we fall well under platform 4: "cell-free carbon optimized biocatalytic biomass conversion and/or CO2 utilization".

Can you advice if we should pursue the ARPA-E DE-FOA-0002388?

ANSWER: Refer to ECOSynBio SBIR/STTR FAQ 1 above.

II. Full Application Phase Questions:

Q6. This is in reference to ARPA-E Control Number Based on your review, can I edit the concept paper submission and resubmit it? Please advise, thanks.

ANSWER: No, The Concept Paper phase of the submission/review process is complete. Refer to General FAQ 7.3 and 7.4, found at <http://ARPA-E.energy.gov> FAQ page.

Q7.1 We are teaming with [a non-DOE Federal laboratory] on our submission to the ECOSynBio STTR FOA. My ... colleagues [are] curious about the mechanism by which ARPA-E will fund [the laboratory]. Would the money be routed directly to [the laboratory] or be provided to our company and then our company would fund [the laboratory] through a CRADA or some other agreement?

ANSWER: Refer to General FAQ 2.21.

Q7.2 In addition, I am curious about representations and certifications for government labs. For the proposal, our company is required to flow down responsibility disclosures to subawardees and assert on their behalf that the applicant and their principals have not been disqualified from eligibility, convicted of crimes, etc. Do we need to flow down these disclosures to a government-owned, government-operated lab and make the assertions about the participating key team members?

ANSWER: Refer to General FAQ 13.3.



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Q8. In late 2020, [my organization] submitted a concept paper to [redacted]. After reviewing our concept paper, ARPA-E determined to encourage the submission of a Full Application. We are evaluating a related process and we would now like to alter the focus of our proposed project and submit a full application for a project that better aligns with this other process and our organization's goals.

Would it be possible to submit a Full Application for this other process as a proof-of-concept project?

ANSWER: Refer to ECOSynBio SBIR/STTR FAQ 1 above. ARPA-E typically allows applicants to modify the proposed project described in their Concept Papers. Keep in mind, however, that the Concept Paper phase is intended to provide applicants with an indication whether they should dedicate resources to preparing a Full Application, and they may lose the benefit of the Concept Paper review if the scope or nature of the project changes significantly from Concept Paper to Full Application

Q9. Can you clarify budget and period of performance for SBIR/STTR applications. ...

Q9.1 Does Phase 2 of the application have to be 12 months of duration? Can it be 18 months?

Q9.2 Phase I/II/IIS combined application is maximum of 36 months. Assuming minimum of 6 months for Phase I period and 24 months for a Phase II period, does it mean that the maximum period of performance for Phase IIS can only be 6 months?

Q9.3 Can the Phase I period be 6 months, Phase II period be 24 months and Phase IIS period be another 12 months for a total of 42 months for the award?

ANSWER (Q9.1 through Q9.3): The *SBIR/STTR Policy Directive* states that performance periods for: (i) SBIR Phase I should not normally exceed six months; (ii) STTR Phase I should not normally exceed twelve months; and (iii) Phase II should not normally exceed two years (refer to Section 7(h)). ARPA-E is limiting the total performance period for combined Phase I/II/IIS awards to thirty-six months. Applicants may, at their discretion, propose performance periods for each of the award phases consistent with the needs of their research programs, provided that the total performance period does not exceed thirty-six months. Reasonableness of the proposed project schedule, including major milestones, and budget are elements of Merit Review (refer to FOA Section V.A.2.(4)).